

CLAIMS

1. An enclosing structure (S), in particular for enclosing and isolating a packaging machine from the
5 outside environment, the structure including:

enclosing panel-shaped means (2), said panel-shaped means (2) including at least one separating surface defining panel (2) defining at least one separating surface (1) for separating two different
10 environments (A, B);

conveying means for conveying flows of purified air (F, F1, F2, F3, F4), associated to said separating surface defining panel (2) to form, together with said separating surface defining panel (2), a fluid-
15 dynamic barrier avoiding contamination between one environment (A) and the other environment (B);

the structure being characterized in that said panel (2) is defined by a first panel (3a) and second panel (3b), suitably air-tight assembled together and fastened to a
20 frame (6) at a prefixed distance, to form an intermediate space (11), inside which a flow of purified compressed air (F) circulates;

said first panel (3a) being turned toward said inner isolated environment (A), defining with said
25 intermediate space (11) at least one conveying channel (21), which communicates with said inner environment (A) and through which a flow of purified air (F1) passes, directed solely toward the inner environment (A); and

30 said second panel (3b) being turned toward said outer environment (B), defining with said

intermediate space (11) at least one conveying channel (22), which communicates with said outer environment (B), and through which a flow of purified air (F2) passes, directed solely toward the
5 outer environment (B).

2. A structure, as claimed in claim 1, wherein said panel (2) defines an inner environment (A) of the structure (S), substantially closed and isolated from an outer
10 environment (B).

3. A structure, as claimed in claim 1, wherein said conveying channels (21,22) are situated near at least one end edge of said panel (2).
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4. A structure, as claimed in claim 1 or 3, wherein said panel (2) is defined by at least one wing (31,32), suitably hinged to an upright (M) of the structure (S); said wing (31,32) having diverting baffle plates (8a,8b)
20 situated in said intermediate space (11) for facilitating conveyance of said flow of purified air (F) toward said conveying channels (21,22).

5. A structure, as claimed in claim 4, wherein said panel
25 (2) includes two wings (31,32), joining at an intermediate area (34); a channel (25) being defined by lateral opposite edges of the wings (31,32) in said intermediate area (34); said channel (25) communicating with the intermediate space (11) of each of said wings
30 (31,32) by at least one first slot (29,28) between said frame (6) and said first panel (3a), and by at least one

second slot (27,26) between said frame (6) and said second panel (3b); with a flow of purified air (F3) circulating through said second slot (27,26), directed solely from said intermediate space (11) to said outer environment (B); and with a flow of purified air (F4) circulating through said first slot (29,28), directed solely from said intermediate space (11) to said inner isolated environment (A).

10 6. Structure, as claimed in claim 4 or 5, wherein said wing (31,32) includes at least one inspection aperture (40) made in a hermetic shutter (42); said aperture (40) having isolating pneumatic means (45) coupled thereto, to create another fluid-dynamic barrier extending along the
15 whole length of the aperture (40).

7. Structure, as claimed in claim 6, wherein said isolating means (45) include at least one first conduit (46) and at least one second conduit (47), situated on
20 opposite sides of said aperture (40); said first conduit (46) having a series of nozzles (48) delivering compressed purified air directed to said second conduit (47), which is aimed at sucking the air coming from the nozzles of said first conduit (46).